## IN THE CLAIMS

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change "CLAIMS" to -- What is claimed is:--.

## Cancel Claims 1 through 10 and add new Claims 11 through 25 as follows:

11. An apparatus for mapping the performance of an agricultural tractor during operation in an agricultural field comprising:

a sensor that generates a signal that is representative of an operating characteristic of the agricultural tractor; and

a controller that is responsive to said signal from said sensor and that generates a map of the performance of the agricultural tractor during operation in the agricultural field.

- 12. The apparatus defined in Claim 11 wherein said sensor is an engine sensor that generates a signal that is representative of an operating characteristic of an engine provided on the agricultural tractor.
- 13. The apparatus defined in Claim 12 wherein said engine sensor is a sensor that generates a signal that is representative of the speed of the engine.
- 14. The apparatus defined in Claim 12 wherein said engine sensor is a sensor that generates a signal that is representative of the amount of fuel supplied to the engine.
- 15. The apparatus defined in Claim 11 wherein said sensor is a speed sensor that generates a signal that is representative of the speed of the tractor.
- 16. The apparatus defined in Claim 11 wherein said sensor is a power take off sensor that generates a signal that is representative of an operating characteristic of a power take off provided on the agricultural tractor.

- 17. The apparatus defined in Claim 16 wherein said power take off sensor is a sensor that generates a signal that is representative of the speed of the power take off.
- 18. The apparatus defined in Claim 11 wherein said sensor is a linkage sensor that generates a signal that is representative of an operating characteristic of a three point linkage provided on the agricultural tractor.
- 19. The apparatus defined in Claim 18 wherein said linkage sensor is a sensor that generates a signal that is representative of the draft force of the three point linkage.
- 20. The apparatus defined in Claim 18 wherein said linkage sensor is a sensor that generates a signal that is representative of the position of the three point linkage.
- 21. The apparatus defined in Claim 11 wherein said sensor is a position sensor that generates a signal that is representative of the position of the tractor in the agricultural field.
- 22. The apparatus defined in Claim 21 wherein said position sensor is a global satellite navigation system.
- 23. The apparatus defined in Claim 11 further including an actual speed sensor that generates a signal that is representative of the actual speed of the agricultural tractor over ground, said controller being responsive to said signals from said sensor and said actual speed sensor and generating the map of the performance of the agricultural tractor during operation in the agricultural field.
- 24. The apparatus defined in Claim 11 further including a theoretical speed sensor that generates a signal that is representative of the theoretical speed of the